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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Patrick B Farley

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EXAMINER

HUSSAIN, IMAD

ART UNIT

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,358	Applicant(s) FARLEY ET AL.	
	Examiner IMAD HUSSAIN	Art Unit 2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,8-10,12,13,16-18,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5, 8, 9, 10, 12, 13, 16, 17, 18, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 November 2008 has been entered.
2. Claims 1, 2, 4, 5, 8, 9, 10, 12, 13, 16, 17, 18, 21 and 22 have been amended.
3. Applicant's amendment of the claims obviates previously raised 35 USC 112 rejection. As such, the rejection is withdrawn.
4. Claims 1, 2, 4, 5, 8, 9, 10, 12, 13, 16, 17, 18, 21 and 22 are pending in Application 10/549358.

Response to Arguments

5. Applicant's arguments, see pages 17-23 of Applicant's Arguments/Remarks, filed 13 November 2008, with respect to the rejection(s) of claim(s) 1, 2, 4, 5, 8, 9, 10, 12, 13, 16, 17, 18, 21 and 22 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hideki Nozaki (US 6128644 A, hereinafter *Nozaki*).

Art Unit: 2451

Applicant argues that the cited references do not teach or suggest that the information collating monitor module is separate from both the clients and the servers or any client-side control intermediary receiving status information from a separate information-collating monitor module.

Examiner agrees with Applicant. However, Nozaki teaches both of these limitations [Nozaki: Figure 1 and Abstract].

Claim Objections

6. Applicant is advised that should claim 2 be found allowable, claim 5 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

7. Applicant is advised that should claim 10 be found allowable, claim 13 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

8. Applicant is advised that should claim 18 be found allowable, claim 21 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two

Art Unit: 2451

claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 3, 7-9, 16-18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hideki Nozaki (US 6128644 A, hereinafter *Nozaki*) in view of Ahuja et al (US 6175869 A) (hereinafter *Ahuja*).

Regarding claims 1, 9, 18 and 21, Nozaki discloses *a method and system of managing service requests from a client module to a plurality of server modules* [Nozaki: Abstract], *the method comprising:*

repeatedly receiving, at least one separate information-collating monitor module [Nozaki: "server status management means 5a"], *from each of plural server modules, an indication of the current operational status of each of the server modules, said operational status comprising current loading information associated with the server modules* [Nozaki: Column 5 Lines 49-54];

*receiving, at a control intermediary [Nozaki: “request distribution means 6a”]
associated with a client module, from at least one said information-collating monitor
module, an indication of the current operational status of each of the server modules
[Nozaki: Column 6 Lines 4-9];*

*selecting, by the control intermediary, of one of the server modules for directing a
service request to from the therewith-associated client module based on the received
indications of operational status of the server modules [Nozaki: Column 6 Lines 12-16].*

Nozaki does not explicitly disclose *the control intermediary repeating the step of
selecting one of the server modules for directing a service request to from the therewith-
associated client module, so as to identify an alternative server module based on the
received loading information, in the event that the transmission of the service request to
the earlier selected server module fails.*

However, Ahuja discloses *the control intermediary repeating the step of selecting
one of the server modules for directing a service request to from the therewith-
associated client module, so as to identify an alternative server module based on the
received loading information, in the event that the transmission of the service request to
the earlier selected server module fails [Ahuja: “detects non-responsive servers and
transparently redirects requests to other replicated servers in the server pool”, Column 3
Lines 11-12].*

Nozaki and Ahuja are analogous art in the same field of endeavor as both
describe load balancing systems. It would have been obvious for one of ordinary skill in
the art at the time the invention was made to utilize the repetition scheme of Ahuja for

Art Unit: 2451

repeating the determination of the best server in the case of server failures in the system of Nozaki. One of ordinary skill in the art would have been motivated to modify the load balancing system of Nozaki with the repetition scheme of Ahuja because in doing so, the system would allow for resilience in the case of server failures.

Regarding claim 7, the combination of Nozaki and Ahuja (hereinafter *Nozaki-Ahuja*) discloses that *the control intermediary selects the one of the other modules on the basis of the loading of the modules* [Nozaki: Abstract and Column 6 Lines 12-16].

Regarding claims 8 and 16, Nozaki-Ahuja discloses that *the control intermediary periodically polls the information-collating module to obtain the indications of the operational status of the other modules* [Nozaki: Claim 4; Ahuja: the information-collating module “periodically collects information about the load offered to each server in the pool by contacting the corresponding server agent”, Column 12, Lines 30-33].

Regarding claim 17, Nozaki-Ahuja discloses that *the other modules are Web service servers* [Nozaki: “WWW system”, Abstract; Ahuja: “a client request directed to a web site or other service”, Abstract].

11. Claims 2, 4, 5, 10, 12, 13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nozaki-Ahuja as applied to claims 1, 9 and 21 in further view of Stricek (*A Reverse Proxy is A Proxy By Any Other Name*) (hereinafter *Stricek*).

Regarding claims 2, 4, 5, 10, 12, 13 and 22, Nozaki-Ahuja discloses a method and system according to claims 1, 9 and 21 *in which the first module comprises a client application* [Ahuja: “web browsers”, Column 8, Line 16] *and the control intermediary* [Nozaki: “server status management means 5a”, Column 5 Lines 49-54], *the method further comprising:*

receiving at the control intermediary a request for a Web service description from the client application, and selecting one of the other modules to direct the request to based on the indications of operational status of the other modules [Ahuja: Abstract];
the control intermediary receiving the requested Web service description and passing the description to the client application [Ahuja: Abstract and Column 5, lines 18-19].

Nozaki-Ahuja does not explicitly disclose *substituting an identifier of the control intermediary into the description* passed to the client application.

However, Stricek teaches the process of *substituting an identifier* (“reference”) *of a control intermediary* (“reverse proxy”) *into the description* passed to the client application (“client”) [Stricek: Page 4, Lines 8-13].

Nozaki-Ahuja and Stricek are analogous subject matter in the same field of endeavor as both network routing mechanisms. One of ordinary skill in the art at the time the invention was made would have been motivated to modify the client side agent taught in Nozaki-Ahuja with the identifier substitution taught in Stricek because doing so creates a single point of access from the client’s point of view [Stricek: Page 1, Lines

Art Unit: 2451

28-29] and further allows for eliminating the duplication of hardware [Stricek: Page 2, Lines 9-10]. Nozaki-Ahuja also states that the client agent may be treated as a proxy [Ahuja: Column 8, Lines 23-25] and further that the client agent may be used with proxies [Ahuja: Column 8, Lines 34-35], suggesting the desirability of such a combination. Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made.

Conclusion

12. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the text of the passage taught by the prior art or disclosed by the examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IMAD HUSSAIN whose telephone number is (571) 270-

Art Unit: 2451

3628. The examiner can normally be reached on Monday through Friday from 0800 to 1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/I. H./

Examiner, Art Unit 2451

/Salad Abdullahi/

Primary Examiner, Art Unit 2457